

forming about the ligated vessels. The microscopic sections alone revealed the true state and extent of the lesion. Sections through the original ulcer showed the epidermis greatly thickened at the edge of the ulcer. The sweat glands and hair follicles were either atrophied or degenerating. The sebaceous glands were present beyond the inflammatory zone and were hypertrophic. The derm and superficial fascia throughout the whole of this region was densely infiltrated with mononuclear cells. The fibrous tissue was increased and there were very few blood vessels. The larger arteries and veins were present but they were empty of blood. Their media stained poorly. Their adventitial coats were infiltrated with round cells and the endothelial layers of many were greatly thickened. Beneath the epidermis were numerous abscesses filled with normally staining and degenerating polymorphonuclear cells. Numerous sections taken from various pieces of tissue removed at operation showed this intense cellulitis extended out in the deeper portions of the superficial fascia, as indicated by the dotted lines in Fig. 1. The derm and superficial fascia was not involved in this region beyond the ulcer except for a few areas of round-cell infiltration. The inflammation followed the larger arteries. The fibrous tissue of the superficial fascia was thickened and hyaline in many places. It was infiltrated everywhere with scattered polymorphonuclear cells and a few small round cells. The arteries showed marked changes. Their adventitial coats were infiltrated with cells. Their medial coats stained poorly and their endothelial linings were thickened in many places to layers as much as five cells in thickness.

Sections taken at the points of ligation of the arteries showed that they had become necrotic and the tissue about was undergoing gangrenous changes.

#### COMMENTS

We were dealing in this case with a chronic cellulitis in an old infected scalp which had become complicated by radium treatment. The arteries for a wide area about this lesion had suffered severe changes and there was an extension of the lesion along these vessels.

I report this case not only because of the unusual character of the lesion, but also because it was not possible to see the extent of this lesion or to note the arterial changes at the time of operation. This was due to the fact that the blood vessels are small in this region and the lesion was diffuse and deep-seated. It was not until we had performed several operations that we appreciated that we could follow these areas of infection by the failure of the arteries to respond to adrenalin.

Having once appreciated this simple adrenalin test it was easy in the last operation to remove the skin well beyond the area of infection and to obtain immediate healing. That diseased arteries will not respond to adrenalin has been known for many years. I report this case here only to em-

phasize the use of adrenalin in such cases. The test may be of use not only in similar cases but also in the treatment of many radium and x-ray burns where arterial changes are largely responsible for the failure to heal.

94 North Madison Avenue.

#### A LIGHTED KELLY ANOSCOPE

By M. S. WOOLF, M. D.

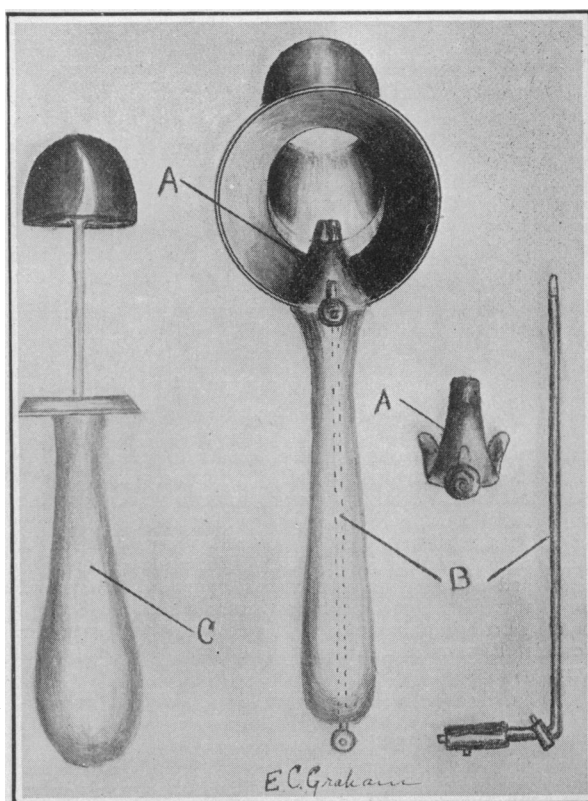
San Francisco

THE treatment of hemorrhoids by injection demands a good view of the interior of the anal canal and lower rectum and working space. A nonfenestrated instrument allows all the hemorrhoids to present at one time and does not require rotating. The wide external mouth of the Kelly anoscope, carrying a light which is reflected onto the hemorrhoids, permits injections easily, however ill the room be illuminated. The accompanying diagram represents a Kelly anoscope fitted with a light carrier (B) which passes through the handle, its terminal light being projected into the rectum by a small reflector (A). This fits on the rim of the instrument adjacent to the handle.

The instrument with obturator (C) is first inserted in the ordinary way, and the light carrier and reflector adjusted after the obturator has been removed.

These modifications were arranged for me by the Electrosurgical Instrument Company, Rochester, New York.

384 Post Street.



Lighted Kelly Anoscope.